



Certificate of Compliance

Certificate: 70001345

Master Contract: 169790

Project: 70198786

Date Issued: May 15, 2019

Issued To: Pepperl+Fuchs GmbH
Lilienthalstrasse 200
Mannheim, Baden-Württemberg, 68307
Germany

Attention: Maxim Graznov

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: E. Giusti
E. Giusti

PRODUCTS

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations
CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations -
Certified to US Standards

Class I, Division 1, Groups A, B, C and D;
Class II, Groups E, F and G;
Class III
Class I, Division 2, Groups A, B, C and D; T4
Ex nA [ia] IIC T4;
Class I, Zone 2, AEx nA [ia] IIC T4;

H-System Galvanically Isolated Barriers, Models HiD followed by 2012, 2025, 2025SK, 2026, 2026SK, 2029, 2029SK, 2030, 2030SK, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2038Y, 2061, 2062, 2071, 2071YA4, 2072, 2072YA4, 2081, 2082, 2821, 2822, 2824, 2842, 2844, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878; installed per drawing 366-005CS-12, except for Model 2012 installed per drawing 366-022CS-12 and Models 2081 and 2082 installed per drawing 366-017CS-12; rated input 30V dc max, ambient temperature -20 to +60 C max. For use with appropriate certified HiD Termination Boards. Entity parameters as follows:



Certificate: 70001345
Project: 70198786

Master Contract: 169790
Date Issued: May 15, 2019

Models 2025, 2025SK, 2026, 2026SK:

Maximum Entity Parameters:

Terminals: 7-(1-4) and 6-(2-5)

Voc/Uo = 26.0V, Isc/Io = 93mA; Po = 605 mW

Ca/Co = 0.099 uF (Grp A-B / IIC); 0.77 uF (Grp C-E / IIB); 2.6 uF (Grp D-F-G / IIA)

La/Lo = 4.1 mH (Grp A-B / IIC); 16.4 mH (Grp C-E / IIB); 32.8 mH (Grp D-F-G / IIA)

Models 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2038Y, 2877, 2878:

Maximum Entity Parameters:

Terminals: 7-(1-4) and 6-(2-5)

Voc/Uo = 26.0V, Isc/Io = 93mA; Po = 605 mW

Ca/Co = 0.099 uF (Grp A-B / IIC); 0.77 uF (Grp C-E / IIB); 2.6 uF (Grp D-F-G / IIA)

La/Lo = 4.1 mH (Grp A-B / IIC); 16.4 mH (Grp C-E / IIB); 32.2 mH (Grp D-F-G / IIA)

Models 2875, 2876:

Maximum Entity Parameters:

Terminals: 7-(1-4) and 6-(2-5)

Voc/Uo = 26.0V, Isc/Io = 93mA; Po = 605 mW

Ca/Co = 0.099 uF (Grp A-B / IIC); 0.77 uF (Grp C-E / IIB); 2.6 uF (Grp D-F-G / IIA)

La/Lo = 4.1 mH (Grp A-B / IIC); 16.4 mH (Grp C-E / IIB); 32.8 mH (Grp D-F-G / IIA)

Models 2029, 2029SK, 2030, 2030SK

Maximum Entity Parameters:

Terminals: 1-4 and 2-5

Voc/Uo = 26.0V, Isc/Io = 93mA; Po = 605 mW

Ca/Co = 0.099 uF (Grp A-B / IIC); 0.77 uF (Grp C-E / IIB); 2.6 uF (Grp D-F-G / IIA)

La/Lo = 4.1 mH (Grp A-B / IIC); 16.4 mH (Grp C-E / IIB); 32.2 mH (Grp D-F-G / IIA)

Terminals: 4-7 and 5-6

Voc/Uo = 1.2 V, Isc/Io = 50 mA; Po = 605 mW

Ca/Co = 1000 uF (Grp A-B / IIC); 1000 uF (Grp C-E / IIB); 1000 uF (Grp D-F-G / IIA)

La/Lo = 14 mH (Grp A-B / IIC); 52 mH (Grp C-E / IIB); 110 mH (Grp D-F-G / IIA)

Terminals: 1-4-7 and 2-5-6

V_T/Uo = 27.2 V, I_T/Io = 143 mA; Po = 605 mW

Ca/Co = 0.089 uF (Grp A-B / IIC); 0.69 uF (Grp C-E / IIB); 2.30 uF (Grp D-F-G / IIA)

La/Lo = 1.43 mH (Grp A-B / IIC); 5.72 mH (Grp C-E / IIB); 11.44 mH (Grp D-F-G / IIA)

Models 2061, 2062, 2071, 2071YA4, 2072, 2072YA4, 2821, 2822, 2824, 2842, 2844

Maximum Entity Parameters:

Terminals: 1-4, 2-5, 3-6 and 7-8

Voc/Uo = 13.2V, Isc/Io = 20mA; Po = 66.0 mW

Ca/Co = 0.94 uF (Grp A-B / IIC); 5.80 uF (Grp C-E / IIB); 21.0 uF (Grp D-F-G / IIA)

La/Lo = 88.0 mH (Grp A-B / IIC); 352.0 mH (Grp C-E / IIB); 704.0 mH (Grp D-F-G / IIA)



Certificate: 70001345
Project: 70198786

Master Contract: 169790
Date Issued: May 15, 2019

Models 2871, 2872

Maximum Entity Parameters:

Terminals: 7-1-4 and 6-2-5

Voc/Uo = 26.0V, Isc/Io = 110mA; Po = 715 mW

Ca/Co = 0.099 uF (Grp A-B / IIC); 0.77 uF (Grp C-E / IIB); 2.6 uF (Grp D-F-G / IIA)

La/Lo = 2.90 mH (Grp A-B / IIC); 11.7 mH (Grp C-E / IIB); 23.5 mH (Grp D-F-G / IIA)

Models 2873, 2874

Maximum Entity Parameters:

Terminals: 7-1-4 and 6-2-5

Voc/Uo = 26.0V, Isc/Io = 110mA; Po = 715 mW

Ca/Co = 0.99 uF (Grp A-B / IIC); 0.77 uF (Grp C-E / IIB); 2.6 uF (Grp D-F-G / IIA)

La/Lo = 2.90 mH (Grp A-B / IIC); 11.7 mH (Grp C-E / IIB); 23.5 mH (Grp D-F-G / IIA)

Models 2012

Maximum Entity Parameters:

Terminals: 1-4 and 2-5

Voc/Uo = 1.7 V, Isc/Io = 45 mA; Po = 20 mW

Ca/Co = 100 uF (Grp A-B / IIC); 1000 uF (Grp C-E / IIB); 1000 uF (Grp D-F-G / IIA)

La/Lo = 17 mH (Grp A-B / IIC); 70 mH (Grp C-E / IIB); 140 mH (Grp D-F-G / IIA)

Models 2081, 2082

Maximum Entity Parameters:

Terminals: 1-2-5-4 and 7-3-6-8

Voc/Uo = 10 V, Isc/Io = 15 mA; Po = 38 mW

Ca/Co = 3 uF (Grp A-B / IIC); 20.2 uF (Grp C-E / IIB); 100 uF (Grp D-F-G / IIA)

La/Lo = 158 mH (Grp A-B / IIC); 632 mH (Grp C-E / IIB); 1260 mH (Grp D-F-G / IIA)

NOTE 1: The Barriers and Termination Boards are certified as component items for mounting in a suitable enclosure where the final assembly is subject to the acceptance by the local authority having jurisdiction.

Class I, Division 1, Groups C and D; Class II, Groups E, F and G; Class III

Class I, Division 2, Groups A, B, C and D; T4

Ex nA [ia IIB] IIC T4;

Class I, Zone 2, AEx nA [ia IIB] IIC T4;

H-System Galvanically Isolated Barriers, Model HiD followed by 2881; installed per Dwg 366-005CS-12; rated input 30V dc max, ambient temperature -20 to +60 C max. For use with appropriate certified HiD Termination Boards.

Entity parameters as follows:



Certificate: 70001345
Project: 70198786

Master Contract: 169790
Date Issued: May 15, 2019

Maximum Entity Parameters:

Terminals: 1-4

Voc/Uo = 26.0V, Isc/Io = 184mA; Po = 1.2 W

Ca/Co = 0.77 uF (Grp C-E / IIB); 2.6 uF (Grp D-F-G / IIA)

La/Lo = 4.2 mH (Grp C-E / IIB); 8.4 mH (Grp D-F-G / IIA)

NOTE 1: The Barriers and Termination Boards are certified as component items for mounting in a suitable enclosure where the final assembly is subject to the acceptance by the local authority having jurisdiction.

Class I, Division 1, Groups A, B, C and D;

Class II, Groups E, F and G;

Class III

Class I, Division 2, Groups A, B, C and D; T4

[Ex ia] IIC

[AEx ia] IIC

Ex nA IIC T4;

Class I, Zone 2, AEx nA_IIC T4;

H-System Termination Board Assemblies; Model ISTA-a-BPb-c-d; Suitable for Class I, Division 2, Groups A, B, C and D with I.S. Connections to Class I, Division 1, Groups A, B, C, D; Class II, Division 1, Groups E, F, G; Class III when Installed per Associated H-System Galvanically Isolated Barrier Control Drawing; Ambient Temperature -20 to +60 C max. For use with appropriate certified H-System Galvanically Isolated Barriers. Entity parameters are determined by the used H-System Galvanically Isolated Barrier.

Where:

a = Associated FBM Module(s): 201, 204, 205, 207b, 211, 214, 215, 216, 217, 218, 237, 241c, 242, 201/237 or 214/215

b = Functional Description of Associated FBM Module(s): (i.e. AO = Analog Output, AI = Analog Input, ...)

c = Fault Detection (FD) and/or Dual (D) 3-wire transmitter (3W) or omitted

d = Single (Blank) or Redundant (R) may be followed by Y1

NOTE 1: The H-System Termination Board Assemblies, Model ISTA-a-BPb-c-d provided by P+F do not include the associated FBM Module(s). The FBM Module(s) to be utilized in the final assembly are required to be Certified as appropriate for the application (i.e. if located in Non-Hazardous Location Certified to the appropriate Ordinary Location Requirement or if located in a Class I, Division 2 application be Certified as suitable for Class I, Division 2); where the final assembly is subject to the acceptance by the local authority having jurisdiction.

NOTE 2: The H-System Termination Board Assemblies, Model ISTA-a-BPb-c-d are certified as component items for mounting in a suitable enclosure were the final assembly is subject to the acceptance by the local authority having jurisdiction.



Certificate: 70001345
Project: 70198786

Master Contract: 169790
Date Issued: May 15, 2019

**Class I, Division 1, Groups A, B, C and D;
Class II, Groups E, F and G;
Class III**

H-System HiD Termination Boards models, Models HiDT followed by B or F; followed by 08 or 16; followed by three alphanumeric characters; may be followed by two alphanumeric characters; may be followed by up to six alphanumeric characters; followed by two to four alphanumeric characters; followed by CC, SC, SP, PL or PF; may be followed by any combination, installed per Associated H-System Galvanically Isolated Barriers Control drawing, ambient temperature -20 to +60 C max. For use with appropriate certified H-System Galvanically Isolated Barriers. Entity parameters are determined by the used H-System Galvanically Isolated Barrier.

H-System HiD Termination Board; Model HiDTB04 - *, where the third character string of '*' may be SC, CC or SP; suitable for installation in a non-hazardous (unclassified) area; provides intrinsically safe circuits when installed per drawing 116-0381; Ta: -20°C to +60°C.

Conditions of certification:

Note 1: The pieces of associated apparatus that are used in this equipment shall be manufactured by Pepperl+Fuchs GmbH, suitable for the application and certified by a NRTL. The user/installer shall also ensure that they are fitted in accordance with CEC/NEC as advised by the manufacturer. Additionally, the pieces of associated apparatus shall have a maximum U_m of 250V rms and a maximum U_o of 30V dc.

Note 2: The HiDTB04 - *, HiDTB08 - * and HiDTB16 - * Termination Boards are certified as a component for mounting in a suitable enclosure where the final assembly is subject to the acceptance by the local authority having jurisdiction.



Certificate: 70001345
Project: 70198786

Master Contract: 169790
Date Issued: May 15, 2019

APPLICABLE REQUIREMENTS

CAN/CSA Standard C22.2 No. 0-M91 <i>(Eighth Edition, Reaffirmed 2006)</i>	General Requirements - Canadian Electrical Code, Part II
CSA Standard C22.2 No. 0.4 -M1982 <i>(Third Edition, Reaffirmed 1999)</i>	Bonding and Grounding of Electrical Equipment (Protective Grounding)
CAN/CSA Standard C22.2 No.142-M1987 <i>(Third Edition, Reaffirmed 2004)</i>	Process Control Equipment Industrial Products
CAN/CSA Standard C22.2 No.213-2017	Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations Industrial Products
CAN/CSA Standard C22.2 No.157-92 <i>(Third Edition, Reaffirmed 2006)</i>	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CAN/CSA Standard E60079-0-02 <i>(Second Edition, Reaffirmed 2006)</i>	Electrical Apparatus for explosive gas atmospheres – Part 0: General Requirements
CAN/CSA Standard E60079-11-02 <i>(Second Edition, Reaffirmed 2006)</i>	Electrical Apparatus for Explosive Gas Atmospheres – Part 11: Intrinsic Safety "i"
CAN/CSA Standard E60079-15-02 <i>(Second Edition, Reaffirmed 2006)</i>	Electrical Apparatus for Explosive Gas Atmospheres - Part 15: Type of Protection "n"
UL Standard 1604 <i>(Third Edition, 1994)</i>	Electrical Equipment for Use in Class I and II, Division 2, and Class III Hazardous (Classified) Locations
UL Standard 916 <i>(Third Edition, 1998)</i>	Energy Management Equipment
UL Standard 913 <i>(Sixth Edition, 2002)</i>	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations
ANSI/UL Standard 60079-0 <i>(First Edition, 2002)</i>	Electrical Apparatus for Explosive Gas Atmospheres – Part 0: General Requirements
ANSI/UL Standard 60079-11 <i>(First Edition, 2002)</i>	Electrical Apparatus for Explosive Gas Atmospheres Part 11: Intrinsic Safety "i"
ANSI/UL Standard 60079-15 <i>(First Edition, 2003)</i>	Electrical apparatus for Explosive Gas Atmospheres Part 15: Electrical Apparatus with Type of Protection "n"